

**DOCKET NO. D-2010-034-2**

**DELAWARE RIVER BASIN COMMISSION**

**Southeastern Pennsylvania  
Ground Water Protected Area**

**Squires Golf Club  
Groundwater and Surface Water Withdrawal  
Horsham Township, Montgomery County, Pennsylvania**

**PROCEEDINGS**

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) by Squires Golf Club on September 4, 2015, for the renewal of an allocation of groundwater and surface water and review of a groundwater and surface water withdrawal project in the Ground Water Protected Area of Southeastern Pennsylvania last approved by the DRBC on March 2, 2011 (Application).

The Application was reviewed for approval under Section 3.8 and for a withdrawal permit under Section 10.3 of the *Delaware River Basin Compact*. The Montgomery County Planning Commission has been notified of pending action on this docket. A public hearing on this project was held by the DRBC on November 15, 2017.

**A. DESCRIPTION**

**1. Purpose.** The purpose of this docket is to renew the approval of an existing golf course irrigation project to continue to supply up to 5.7 million gallons per month (mgm) of water from an intake located in the irrigation pond and up to 5.0 mgm of groundwater from existing Well 1. Water from the irrigation pond is used to irrigate the golf course turf and water from Well 1 is used to augment the irrigation pond. Squires is not requesting an increase in the allocations from that contained in its prior approval.

**2. Location.** The project is located in the Park Creek Watershed in Horsham Township, Montgomery County, Pennsylvania. Well 1 is completed in the Stockton Formation. Park Creek

near the project site is designated by the Pennsylvania Department of Environmental Protection (PADEP) as supporting Warm Water Fishes (WWF) and Migratory Fishes (MF).

Specific location information has been withheld for security reasons.

3. **Area Served.** The project withdrawals will be used to supply water to the docket holder's golf course irrigation system only.

4. **Physical features.**

a. **Design criteria.** Squires Golf Club is an 18-hole golf course located on approximately 130 acres and consists of 60 acres of fairways and 16 acres of tees and greens, with an existing average daily water demand of 0.20 mgd and a maximum daily demand of 0.34 mgd. Potable and sanitary water for the golf course facilities is supplied by two on-site wells that generally withdrawal less than 300 gpd. The docket holder estimates no increase in demand over the next 10 years.

The irrigation system is sourced from one pond, which is augmented by groundwater from Well No. 1 (generally from May to October). The irrigation pond collects inflow from springs and stormwater runoff from the golf course which feeds underground piping with approximately 850 sprinkler heads for spray distribution to the fairways, tees, and greens. The system storage is estimated at 2.61 million gallons with 8 days of supply. Based on withdrawal records an average of approximately 80 percent of the pond withdrawal is comprised of groundwater augmented to the pond from Well 1.

b. **Facilities.** The docket holder's existing well and irrigation pond has the following characteristics:

WELL NO.	DEPTH	CASED DEPTH/ CASING DIAMETER	PUMP CAPACITY	YEAR DRILLED
Well 1	300'	unknown	200 gpm	1974

INTAKE	DRAINAGE AREA	STORAGE CAPACITY	PUMP CAPACITY	YEAR CONSTRUCTED
Irrigation Pond	0.2 sq. miles	2.61 million gallons	1,000 gpm	1962

The well and pond intake are metered.

The project facilities are above the 100-year flood elevation.

The water system is not presently interconnected with any other distribution system.

- c. **Other.** Domestic wastewater is conveyed to an on-lot septic system.

## B. **FINDINGS**

The project is located within the Southeastern Pennsylvania Ground Water Protected Area delineated by the DRBC pursuant to *Compact* Section 10.2. The project is designed to conform to the requirements of the *Water Code*, *Water Quality Regulations* and *Ground Water Protected Area Regulations (GWPAP)* of the DRBC.

Review and analysis of the application pursuant to Section 6.D. of the *GWPAP* result in the following:

1. The withdrawal is consistent with the Commission's Comprehensive Plan and the policies and purposes of these regulations.
2. Opportunities to satisfy water requirements on a timely basis from existing available supplies and facilities have been explored and found infeasible.
3. The withdrawal, in conjunction with other withdrawals in the applicable ground water basin, should not exceed withdrawal limits of the ground water basin, aquifer or aquifer system.
4. The withdrawal should not significantly impair or reduce the flow of perennial streams in the area.
5. Existing ground and surface water withdrawals should not be adversely impacted, or will be otherwise assured of adequate supplies in accordance with the requirements of Section 10 of the *GWPAP*. There have been no reported complaints of well interference since the first approval of this renewal project. No adverse impact is anticipated due to continued operation of this project.
6. The withdrawal should not cause substantial, permanent adverse impact to the overlying environment.
7. The docket holder adopted and will implement conservation and management programs as required by Section 7 of the *GWPAP*.

The docket holder's withdrawals were approved by the Commission in Docket No. D-2010-034-1 on March 2, 2011. The allocations approved by the previous docket were based on historic withdrawals from the pond intake and Well 1. A pumping test including groundwater and surface water monitoring will be required if additional groundwater withdrawals are requested in the future.

On September 22, 2017 Commission staff conducted a field inspection of the irrigation pond and groundwater supply system. The project site had not been visited by DRBC staff previously. Irrigation water is withdrawn from the middle and largest of three constructed ponds on the northeast portion of the golf club property. Although the water level in the irrigation pond was several inches below the stone masonry dam spillway, water was observed to be flowing in the rip-rap lined channel below the irrigation pond as a result of visible leakage through the dam wall and possibly from underflow of water stored in the pond. The channel flowed into the lower pond near Stong Lane where wet ground conditions presumably from buried springs likely contributed additional flows to the water body. Water was observed to be flowing through the lower pond spillway to the culvert beneath Stong Lane. Well 1 was in operation during the site visit pumping water into the irrigation pond.

The Squires Golf Club is located in the Park Creek sub basin, where total net annual groundwater withdrawal (360 mgy) is less than the withdrawal limit set in Section 6.I of the *GWPAR* (778 mgy). The total annual groundwater allocation from this well is limited to 30 mgy (5.0 times 6 months), a fraction of which will be returned to groundwater. However, even if no water from this project were returned to groundwater, the total net annual groundwater withdrawal from this sub basin would remain below the withdrawal limits set in Section 6.1 of the *GWPAR*. Therefore, the proposed withdrawal from Well No. 1, in conjunction with other withdrawals in this sub basin, is in accordance with the requirements of Section 6.1 of the *GWPAR*.

The DRBC estimates that the project withdrawals, used for the purpose of irrigation, result in a consumptive use of 90 percent of the total water use. The DRBC definition of consumptive use is defined in Article 5.5.1.D of the *Administrative Manual – Part III – Basin Regulations – Water Supply Charges*.

The project does not conflict with the Comprehensive Plan, and is designed to prevent substantial adverse impact to the water resources related environment, while sustaining the current and future water uses and development of the water resources of the Basin.

### **C. DECISION**

I. Effective on the approval date for Docket No. D-2010-034-2 below, Docket No. D-2010-034-1 is terminated and replaced by Docket No. D-2010-034-2.

II. The project as described in the Section A “Physical features” is approved pursuant to Section 3.8 of the *Compact* and is granted this withdrawal permit pursuant to Section 10.3 of the *Compact* and *GWPAR*, subject to the following conditions:

a. Docket approval is subject to all conditions, requirements, and limitations imposed by the PADEP. Within 60 days (February 11, 2018), the docket holder shall provide written confirmation to the Commission that it has registered and reported with PADEP all groundwater sources described in this docket in accordance with the Pennsylvania Regulations (Title 25 - Environmental Protection, [25 PA. CODE CH. 110], Water Resources Planning).

b. The wells and operational records shall be available at all times for inspection by the DRBC.

c. The wells shall be operated at all times to comply with the requirements of the *Water Code* and *Water Quality Regulations* of the DRBC.

d. During any month, the withdrawal from the docket holder's well and pond intake shall not exceed the following:

WELL/ INTAKE NO.	INSTANTANEOUS ALLOCATION (GPM)	MONTHLY ALLOCATION (MILLION GALLONS)
Well 1	200	5.0
Pond Intake	1,000	5.7
2 Potable Wells	Domestic Use Only	

e. The wells shall be equipped, where possible, with readily accessible capped ports and minimum ½ inch inner diameter (ID) drop pipes as repairs or modifications are made at each existing well so that water levels may be measured under all conditions.

f. The project withdrawals shall be metered with an automatic continuous recording device that measures to within 5 percent of actual flow. An exception to the 5 percent performance standard, but no greater than 10 percent, may be granted if maintenance of the 5 percent performance is not technically feasible or economically practicable. A record of daily withdrawals shall be maintained, and monthly totals shall be reported annually by June 30, to the Bureau of Watershed Management, PADEP. Withdrawal records shall be available at any time to the Commission if requested by the Executive Director.

g. The docket holder shall pay for surface water use in accordance with *Administrative Manual – Part III Basin Regulations – Water Supply Charges*.

h. The docket holder shall implement to the satisfaction of the Bureau of Watershed Management, PADEP, the drought management plan as submitted with the application.

i. Nothing herein shall be construed to exempt the docket holder from obtaining all necessary permits and/or approvals from other State, Federal or local government agencies having jurisdiction over this project.

j. The docket holder is permitted to provide the water approved in this docket to the areas included in Section A.3. Area Served of this docket. Any expansion beyond those included in Section A.3. Area Served is subject to DRBC review and approval in accordance with Section 3.8 of the *Compact* and the *GWP*AR.

k. The docket holder is responsible for timely submittal to the DRBC of a docket renewal application on the appropriate application form including the appropriate docket application filing fee (see 18 CFR 401.43) at least 6 months in advance of the docket expiration date set forth below. The docket holder will be subject to late filed renewal surcharges in the event of untimely submittal of its renewal application, whether or not DRBC issues a reminder notice in advance of the deadline or the docket holder receives such notice. In the event that a timely and complete application for renewal has been submitted and the DRBC is unable, through no fault of the docket holder, to reissue the docket before the expiration date below, the terms and conditions of the current docket will remain fully effective and enforceable against the docket holder pending the grant or denial of the application for docket approval.

l. The docket holder shall be subject to applicable DRBC regulatory program fees, in accordance with duly adopted DRBC resolutions and/or regulations. (see 18 CFR 401.43).

m. This approval is transferable by request to the DRBC Executive Director provided that the project purpose and area served approved by the Commission in this docket will not be materially altered because of the change in project ownership. The request shall be submitted on the appropriate form and be accompanied by the appropriate fee (see 18 CFR 401.35).

n. The docket holder shall request a name change of the entity to which this approval is issued if the name of the entity to which this approval is issued changes its name. The request for name change shall be submitted on the appropriate form and be accompanied by the appropriate fee (see 18 CFR 401.35).

o. The docket holder shall incorporate and implement reasonable conservation practices and measures consistent with efficient utilization of water resources.

p. The issuance of this docket approval shall not create any private or proprietary rights in the water of the Basin, and the Commission reserves the rights to amend, alter or rescind any actions taken hereunder in order to insure the proper control, use and management of the water resources of the Basin.

q. If the monitoring required herein or any other relevant data or information demonstrates that the operation of this project is interfering with or otherwise impairing existing uses of ground or surface water, or if the permit holder receives a complaint from an existing ground or surface water user within the zone of influence of the withdrawal alleging such interference or impairment, the permit holder shall immediately notify the Executive Director, and unless excused by the Executive Director, shall investigate the demonstrated or alleged impacts. For purposes of this condition, notification shall mean either (a) electronic transmittal of written notice to the Executive Director via email (using addresses posted on the DRBC website); or (b) written notice to the Executive Director and a telephone call to the Project Review Section at 609-883-9500, ext. 216. (Oral notification must always be accompanied by immediate written notification directed to the Executive Director.) In addition, the permit holder shall provide written notice to all potentially affected water users of the permit holder's responsibilities under this condition. **Any well or surface water supply that is impaired as a result of the permit holder's project withdrawal shall be repaired, replaced or mitigated at the permit holder's expense.**

The scope of the options to consider for repair, replacement and/or mitigation shall not be limited solely to those that are owned, operated, or controlled by the project sponsor. An investigation report and/or mitigation plan prepared and certified by a licensed professional engineer and/or a licensed professional geologist shall be submitted to the Executive Director as soon as practicable following notice of the demonstrated or alleged impairment consistent with this paragraph. The Executive Director shall make the final determination regarding the scope and sufficiency of the investigation and the extent of any mitigation measures that may be required. Where ground and surface waters are rendered unavailable, unusable, or unsuitable for the pre-existing use, the Executive Director may direct the permit holder to take interim actions to mitigate such impacts, pending completion of the investigative report and any long-term repair, replacement or mitigation.

r. The Executive Director may modify or suspend this approval or any condition thereof, or require mitigating measures pending additional review, if in the Executive Director's judgment such modification or suspension is required to protect the water resources of the Basin.

s. For the duration of any drought emergency declared by either Pennsylvania or the Commission, water service or use by the docket holder pursuant to this approval shall be subject to the prohibition of those nonessential uses specified by the Governor of Pennsylvania, the Pennsylvania Emergency Management Council, PADEP, or the Commonwealth Drought Coordinator, to the extent that they may be applicable, and to any other emergency resolutions or orders adopted hereafter by the Commission.

t. Any person who objects to a docket decision by the Commission may request a hearing in accordance with Article 6 of the Rules of Practice and Procedure. In accordance with Section 15.1(p) of the Delaware River Basin Compact, cases and controversies arising under the Compact are reviewable in the United States district courts.

u. The docket holder owes a remaining balance of \$2,000 for this docket renewal. The balance shall be paid within sixty (60) days of issuance of this docket (by February 11, 2018) or fees may be assessed in accordance with the Commission's Penalty Matrix.

**BY THE COMMISSION**

**APPROVAL DATE:**

**EXPIRATION DATE: December 13, 2027**